

SERVICE MANUAL & PARTS LIST (with price)

SF-4400 (LX-594A)

SF-4600B (LX-594E/F)

JUN. 1994



SF-4400



SF-4600B

INDEX

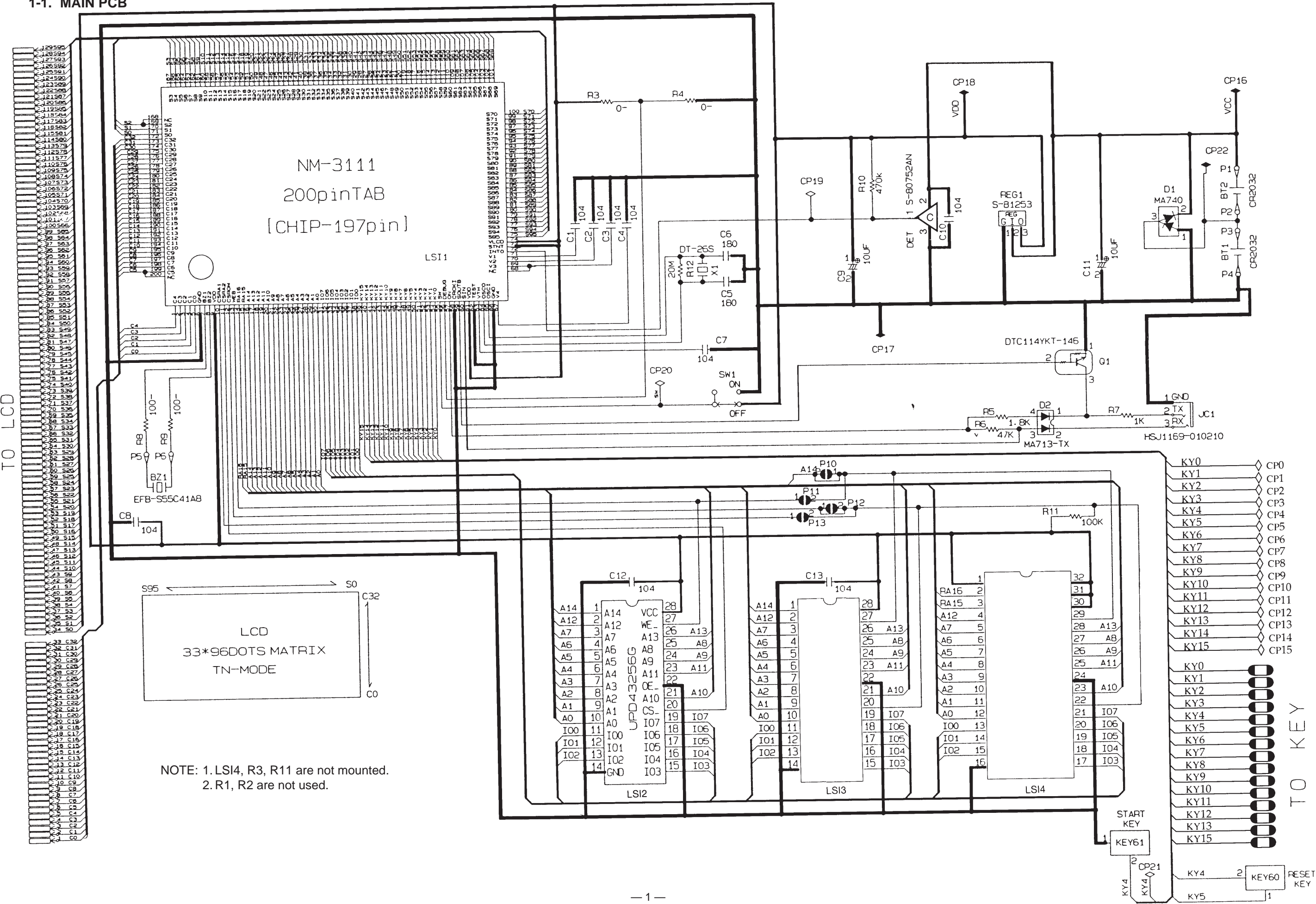
CASIO®

CONTENTS

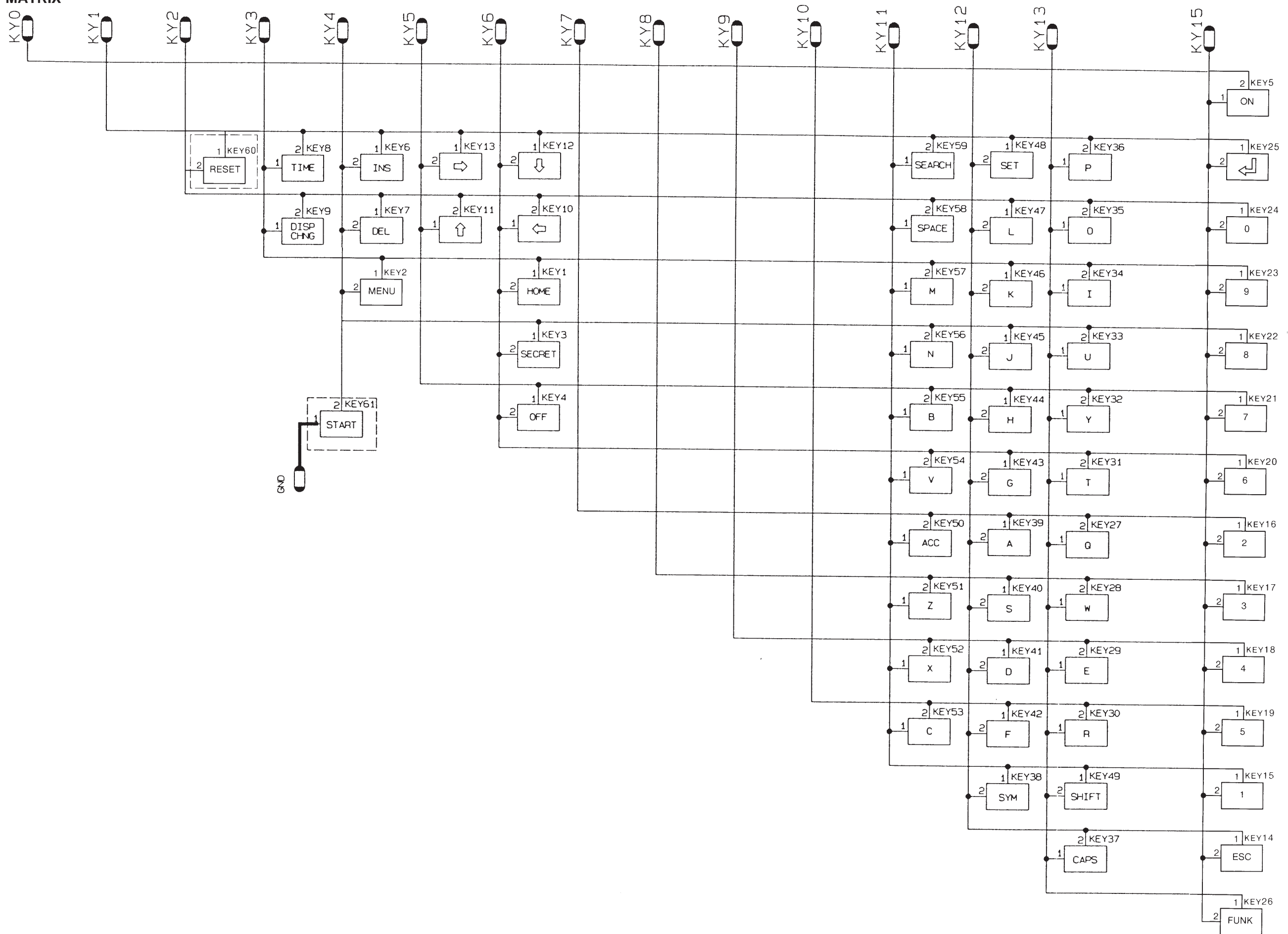
1.	SCHEMATIC DIAGRAM	1
1-1.	MAIN PCB	1
1-2.	KEY MATRIX	2
2.	SPECIFICATIONS	3
3.	TO REPLACE THE BATTERIES	5
4.	DATA TRANSFER	6
5.	OPERATION REFERENCE	10
5-1.	RESET OPERATION	10
5-2.	TO ADJUST THE DISPLAY CONTRAST	11
5-3.	TO CHECK THE MEMORY STATUS	11
5-4.	THE SOUND MENU	11
6.	LSI, IC (Pin function)	12
6-1.	CPU	12
6-2.	RAM:μPD43256G-101215LL (LSI2,LSI3)	13
6-3.	VOLTAGE REGULATOR:S-81253SGUP (REG1)	14
6-4.	VOLTAGE DETECTOR:S-80752AN (DET1)	14
7.	TROUBLESHOOTING	15
8.	HARD CHECK	18
9.	ASSEMBLY VIEW	23
10.	PARTS LIST	25

1. SCHEMATIC DIAGRAM

1-1. MAIN PCB



1-2. KEY MATRIX



2. SPECIFICATIONS

Data storage:

Storage and recall of telephone, memo, schedule, reminder data; calendar display; secret area; editing; memory status display.

Clock:

World time; reminder alarm; schedule alarm; daily alarm; accuracy under normal temperatures: ± 3 seconds average.

Calculation:

10-digit arithmetic calculations; arithmetic constants (+, -, x, \div); independent memory; percentages; square roots; 20-digit approximations; date calculations; other mixed calculations.

General:

Display element: 16-column x 4-line LCD

Memory capacity: SF-4400: 32 KB (28579 bytes)
SF-4600B: 64 KB (61347 bytes)

Main component: LSI

Power supply: 2 lithium batteries (CR2032)

Power consumption: 0.05W

Battery life:

Approximately 450 hours continuous operation in Telephone Directory

Approximately 380 hours repeating one minute of input and 10 minutes of display in Telephone Directory

Approximately 12 months for memory backup

Auto power off: Approximately 6 minutes after last key operation

Operating temperature: 0°C ~ 40°C (32°F ~ 104°F)

Dimensions:

Unfolded: 10.6H x 141W x 159.5Dmm ($\frac{3}{8}$ "H x 5 $\frac{1}{2}$ "W x 6 $\frac{1}{4}$ "D)

Folded: 12.4H x 141W x 82Dmm ($\frac{1}{2}$ "H x 5 $\frac{1}{2}$ "W x 3 $\frac{1}{4}$ "D)

Weight: 98.2g (3.5 oz)

Current consumption:

Power switch	TYP. [μ A]	MAX [μ A]
OFF	5.15	10.0
ON	256	420

Storage Capacity:

The 64K bytes memory capacity (32K bytes for SF-4400) includes a 61347 bytes user area (28579 bytes for SF-4400). The following shows examples of what this means for the storage of data in each mode.

Telephone Directory:

Approximately 2920 (1360 for SF-4400), under the following conditions:

8-character name

10-character telephone number

Approximately 1460 (680 for SF-4400), under the following conditions:

8-character name
10-character telephone number
20-character address

Memo:

Approximately 2780 (1290 for SF-4400), 20-character memos.

Schedule Keeper:

Approximately 1910 (890 for SF-4400), under the following conditions:

1 item per day, 20 characters per item
30 days per month
Starting time specified, alarm time set

Approximately 2190 (1020 for SF-4400), under the following conditions:

1 item per day, 20 characters per item
30 days per month
Starting time specified, no alarm time

Reminder:

Approximately 3600 (1680 for SF-4400), under the following conditions:

10 characters per item
Alarm time set

Approximately 4080 (1900 for SF-4400), under the following conditions:

10 characters per item
No alarm time

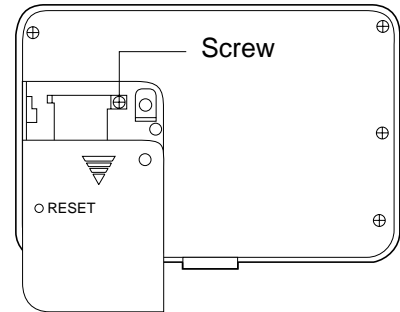
3. TO REPLACE THE BATTERIES

- 1) Loosen the screw on the back of the SF-4400/4600B that holds the battery compartment cover in place, and remove the cover.
- 2) Loosen the screw that secures one of the two battery holders in place and remove the battery holder.

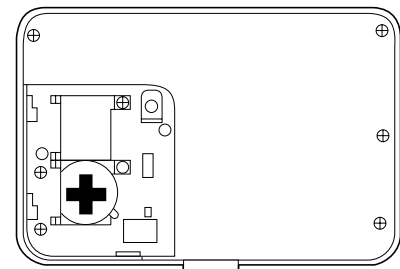
Caution:

Be sure to remove only one battery at a time.

Otherwise, you will lose all data stored in memory.



- 3) Replace the old battery with a new one, making sure that the positive (+) side of the new battery is facing up (so you can see it).



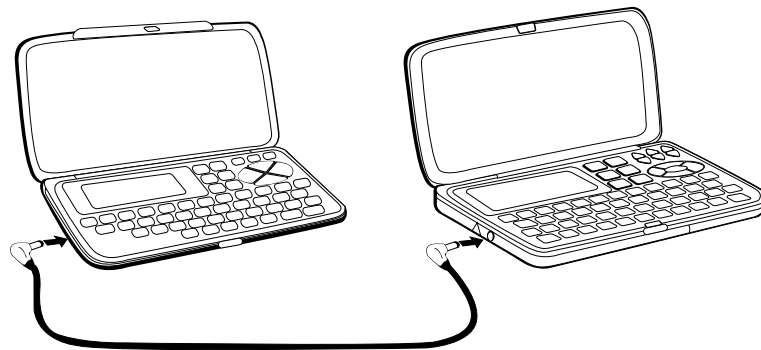
- 4) Replace the battery holder and secure it by tightening its screw.
 - Be sure careful that you do not over tighten the screw.
- 5) Repeat steps 2) through 4) for the other two batteries.
 - Be sure to replace all two batteries. Never mix old batteries with new ones, and be sure to use CR2032 lithium batteries only.
- 6) After you replace all two batteries, replace the battery compartment cover and secure it by tightening its screw.
 - Be careful that you do not over tighten the screw.

4. DATA TRANSFER

SF-4400/SF-4600B can transfer customers data to other SF-4400/SF4600B with memory protection only when replacing the LCD or the outer case. How to transfer the data.

* Before connecting the cable (SB-60/62), be sure to reset the slave machine to clear all data.

- 1) Turn off the power switch and connect the two units using the cable (SB-60/62) as shown in the drawing.



SB-60/62 accessory cable

- 2) Turn on the power switch of each machine.
- 3) The slave machine must be set the date of Feb. 3rd, 1901 into the memory under the calculator mode.

Operation: 1. Press **ON** **MENU**
2. Select "CAL" mode or press **6**.

3. **1** **TIME** **DATE** **2** **TIME** **DATE** **3** **TIME** **DATE** **M+** **R**

M	SUN
1901/ 2/ 3	

If you don't set the date, the "PASSWORD" isn't transferred to the slave machine.

Setting up for Data Communications

The following procedures describe what you should do to set up for data communications between two SF Units or between an SF Unit and a personal computer. In addition to hardware connections, it details how to set up the communications parameters and how to set up the SF-4400/4600B to receive data. By following these instructions carefully, you can be ensured of successful communications every time.

To connect two SF Units

1. Check to make sure that the power of the two SF Units is switched off.
2. Remove the covers from the connectors on the two SF Units.
3. Connect the two SF Units using the optional SB-60/62 cable. You can also connect them using an SB-60/62 cable.

Important

Be sure to replace the connector covers on the SF Units when you are not performing data communications.

- 4) Check the hardware parameters.
 1. Select "TEL" mode or press ① under MENU screen.
 2. Press FUNC twice to display the second function menu.

FUNC **FUNC**

1* TO SECRET AREA
2 ALL DELETE
3 LABEL EDIT
4 DATA COMM

CAPS



* If the password isn't registered in the SF unit, display shows **X** instead of "1".

- You can perform the above operation while the initial screen of the Memo Mode, Schedule Keeper, Calendar, or Reminder is displayed also.

3. Press 4 to select DATA COMM.

4

1 SEND
2 RECEIVE
3 SET UP PAR.

CAPS



4. Press 3 to select SET UP.

3

** SET UP PAR. ***
PARITY E O **N**
BIT LENGTH 7 8
BPS 4800 9600

CAPS



• **N** is blinking.

5. If the units have another condition, reset as above.

- To change the parameters



1. Use the Δ and ∇ cursor keys to change the selected parameter on the display.
2. Use the \triangleleft and \triangleright cursor keys to change the high-lighted setting of the currently selected parameter.



3. Press SET to store them in memory.

5) Set up the slave machine

1. While an initial screen is displayed, press FUNC twice to display the second function menu.



1* TO SECRET AREA
2 ALL DELETE
3 LABEL EDIT
4 DATA COMM



* If the password isn't registered in the SF unit, display shows **X** instead of "1".

- You can perform the above operation while the initial screen of the Memo Mode, Schedule Keeper, Calendar, or Reminder is displayed also.

2. Press 4 to select DATA COMM.



1 SEND
2 RECEIVE
3 SET UP PAR.



3. Press 2 to select RECEIVE.



← DATA →
RECEIVE OK
TO STOP
PRESS (ESC)



6) Set up the customer's machine.

1. While an initial screen is displayed, press FUNC twice to display the second function menu.



1* TO SECRET AREA
2 ALL DELETE
3 LABEL EDIT
4 DATA COMM



* If the password isn't registered in the SF unit, display shows **X** instead of "1".

- You can perform the above operation while the initial screen of the Memo Mode, Schedule Keeper, Calendar, or Reminder is displayed also.

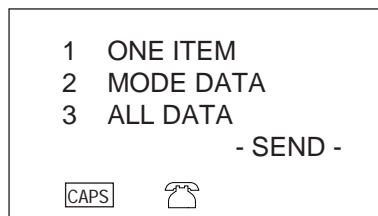
2. Press 4 to select DATA COMM.

4



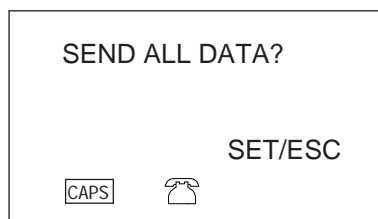
3. Press 1 to select SEND.

1



4. Press 3 to select ALL DATA.

3



5. Press SET to start the send operation or ESC to abort the operation without sending anything.

SET or ESC



- Data is send in the sequence: Telephone Directory, Memo Mode, Reminder Mode, Schedule Keeper, Calendar.
 - To abort the send operation at any time, press ESC.
 - If an error occurs during the send operation, the message "TRANSMIT ERROR!" appears on the display. Press ESC to clear the error message.
6. After the send operation is complete, the display returns to the initial screen of the mode you were in when you started this procedure.

5. OPERATION REFERENCE

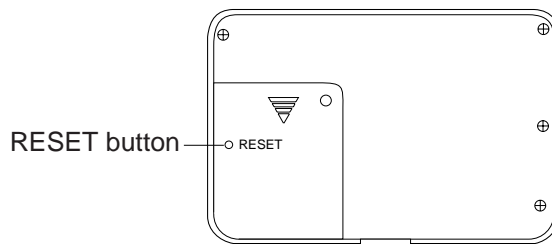
5-1. RESET OPERATION

The following procedure erases all data stored in the memory of the SF Unit.

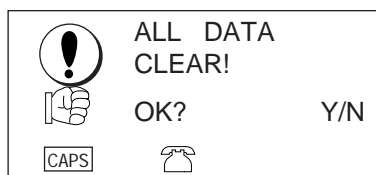
Perform the following operation only when you want to delete all data and initialize the settings of the SF Unit.

Remember-you should always keep copies of important data by writing it down, by transferring it to a personal computer or other SF Unit.

To reset the SF Unit's memory



1. Switch on power and press the **RESET** button with a thin, pointed object.



Warning!

The next step deletes all data stored in the SF Unit's memory. Make sure that you really want to delete the data before you continue!

2. Press **Y*** to reset the memory and delete all data or **N** to abort the reset operation without deleting anything.

* Note that the letter key you press to indicate "yes" depends on the system language, as noted below.

English: **Y**
French: **O**

Spanish: **S**
Italian: **S**

German: **J**

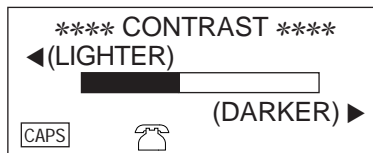
Following the reset operation described above, the Home Time display appears and the SF Unit settings are initialized as noted below.

Home Time:	12-hour format JAN/1/1994 AM/12:00 00
Zone:	London(LON)
World Time:	New York(NYC)
Daily Alarm:	12:00 PM
Menu Mode:	Telephone mode
Language:	English

Sound: Schedule alarm → ON
 Reminder Alarm → ON
 Daily alarm → OFF
 Key → ON
 Character input: CAPS

5-2. TO ADJUST THE DISPLAY CONTRAST

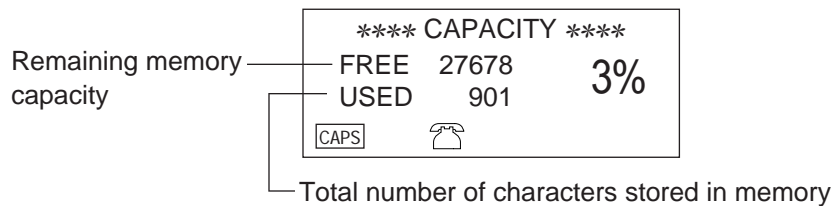
- 1 Enter the Telephone Directory Mode.
 - You could enter any mode except the Calculator mode here.
- 2 Press **SHIFT** and confirm that the "S" indicator is on the display.
- 3 Press **CONT**.
- 4 Use the ◀ and ▶ keys to adjust the contrast.



- 5 After you are finished, press **ESC** to clear the contrast adjustment display.

5-3. TO CHECK THE MEMORY STATUS

Hold down **SHIFT CAPA** to display a screen that shows the current memory status. To clear the memory status display, release **CAPA**. (SF-4400)



5-4. THE SOUND MENU

The sound menu lets you switch the key input tone and the various alarms of the SF Unit on and off.

Flashing dot indicates currently selected item

SCHED AL	● ON	OFF
REMINDER	● ON	OFF
DAILY AL	ON	● OFF
KEY	● ON	OFF

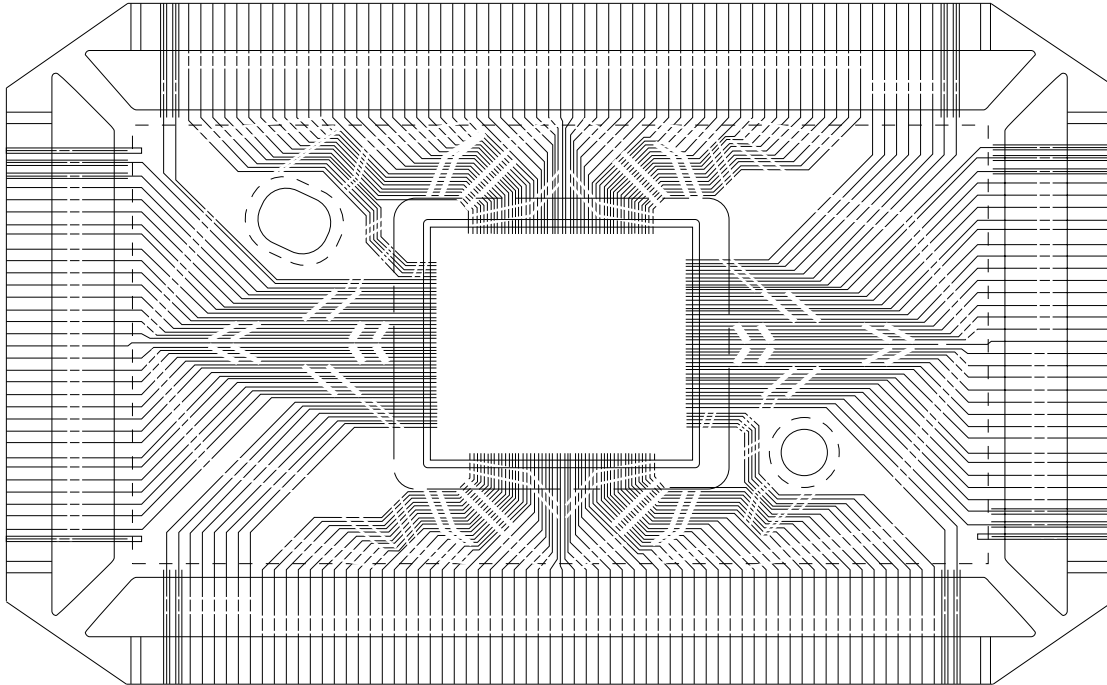
Dot indicates on/off status

The on/off status of each SOUND menu items is indicated by a dot, and the dot that is flashing on the menu is the one that is currently selected.

Use Δ and ▽ to change the currently selected (flashing) item. Use ◀ and ▶ to switch the currently selected item on and off.

6. LSI, IC (Pin function)

6-1. CPU

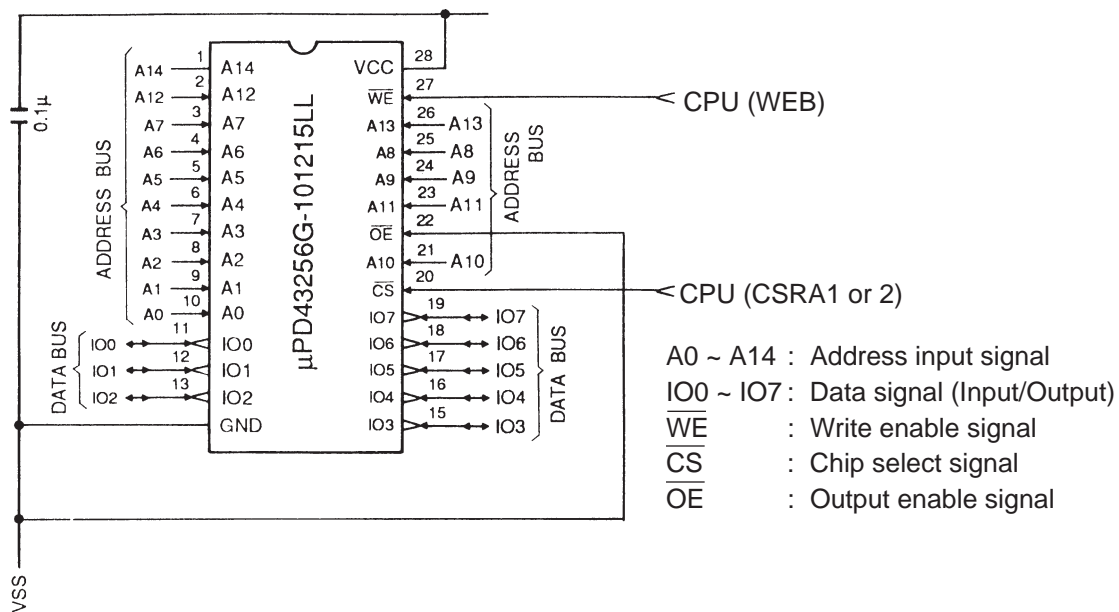


No. 1

Pin No.	Signal	I/O	Function
1 ~ 5	C0 ~ 4	Out	Common Signal for display
6	GND	In	GND /0[V]
7,8	BZ1,2	Out	Buzzer terminal
9	VDD	In	Power supply/5.3[V]
10	CSRA1	Out	Chip enable signal (Not used)
11	CSRA2	Out	Chip enable signal for RAM
12	CSROM	Out	Chip enable signal (Not used)
13	WEB	Out	Write enable signal for RAM
14,15	RA15,16	Out	Address bus (Not used)
16 ~ 30	A0 ~ 14	Out	Address bus
31 ~ 38	IO0 ~ 7	I/O	Data bus
39 ~ 54	KY0 ~ 15	I/O	Key signal
55	SW	In	Battery switch (On: "L"/0[V] Off: "H"/6[V])
56	DEBUG	-	Test for manufacturer
57	ON	Out	Data communication enable
58	CRCKI	In	GND/0[V]
59	SOUTB	Out	Transmission data output
60	SIN	In	Transmission data input
61	VDD	In	Power supply/5.3[V]
62	TEST	-	Test for manufacturer
63	VTM	-	Not used

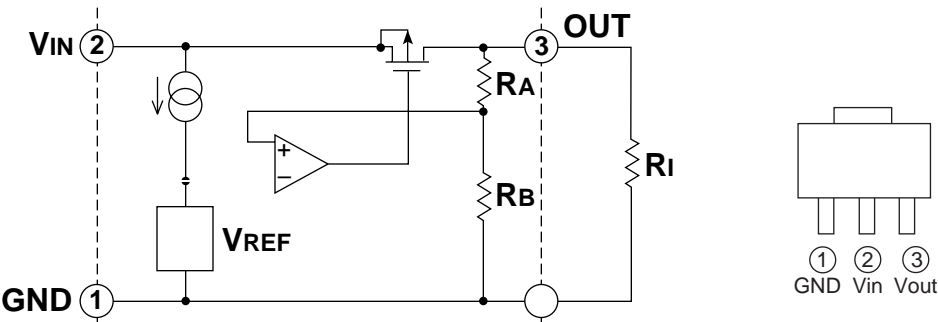
Pin No.	Signal	I/O	Function
64,65	OSC I/O	I/O	Clock terminal (DT-26S)
67,69~71	V1 ~ 4		Voltage for LCD driver OFF: 0[V] ON: V1: 0.64(Light) ~ 1.29(Dark)[V] V2: 1.29 ~ 2.56 [V] V3: 3.99 ~ 2.71 [V] V4: 4.64 ~ 3.99 [V]
68	NC	-	Not used
72	INTO	In	Low battery detection INTO<5.2[V]=> No power on
73	STNT	-	VDD/5.3[V]
74	VLCD	In	Power supply/5.3[V]
75 ~ 171	S0 ~ 95	Out	Segment signal for display
172 ~ 199	C5 ~ 32	Out	Common signal for display
168,200	NC	-	Not used

6-2. RAM: μ PD43256G-101215LL (LSI2,LSI 3)



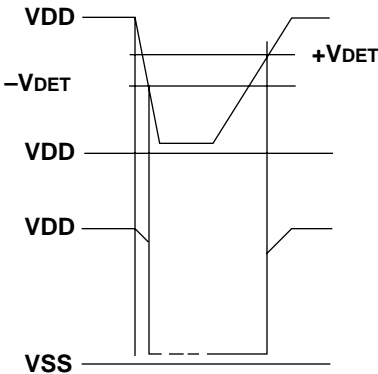
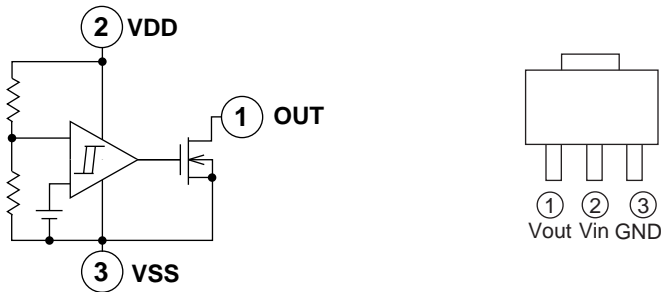
6-3. VOLTAGE REGULATOR: S-81253SGUP (REG1)

Output Voltage (Vout) : $5.3V \pm 5\%$



6-4. VOLTAGE DETECTOR: S-80752AN (DET1)

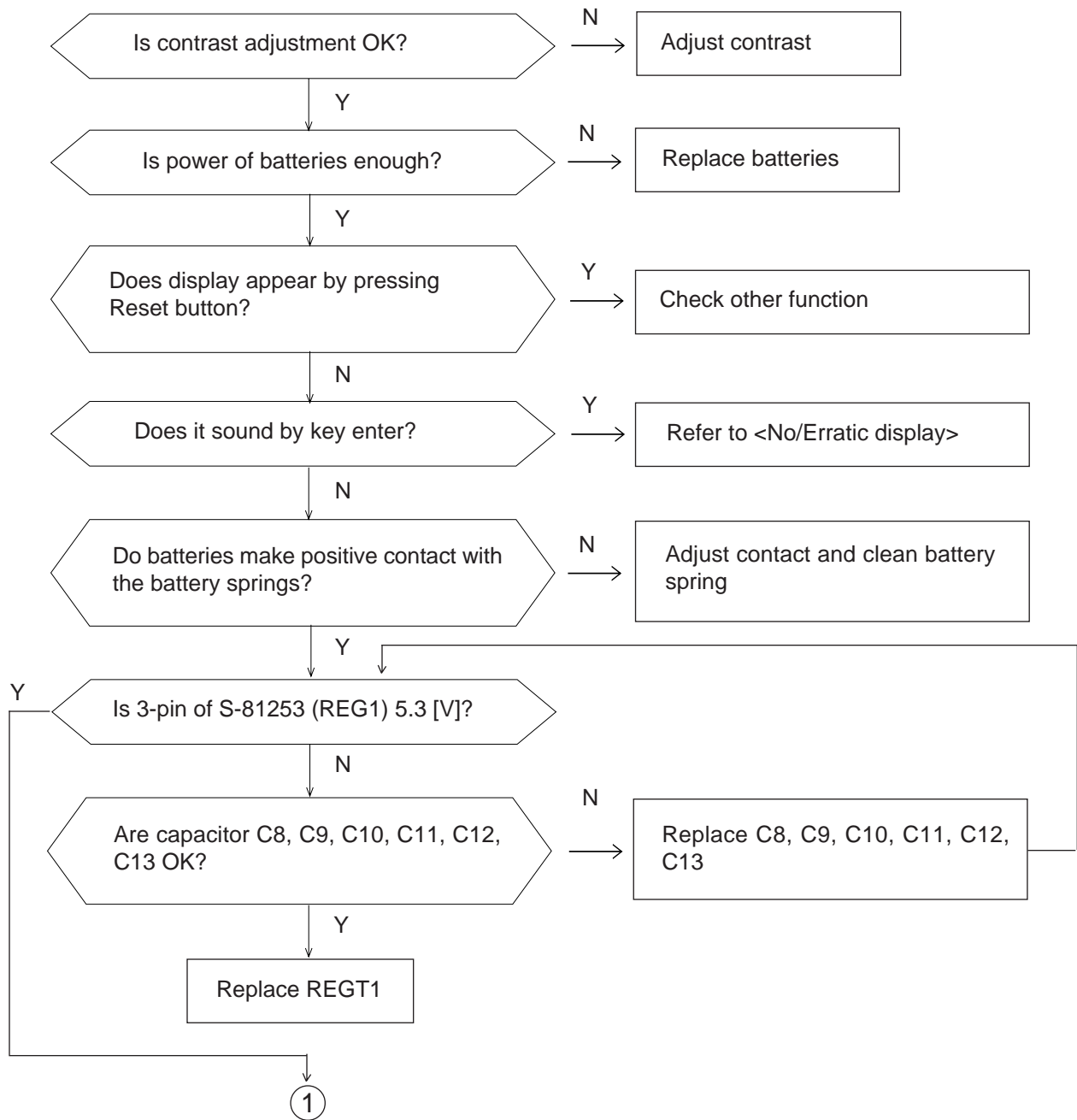
Detection Voltage(-VDET) : $5.2V \pm 2.5\%$
[5.07V (MIN) ~ 5.33V (MAX)]

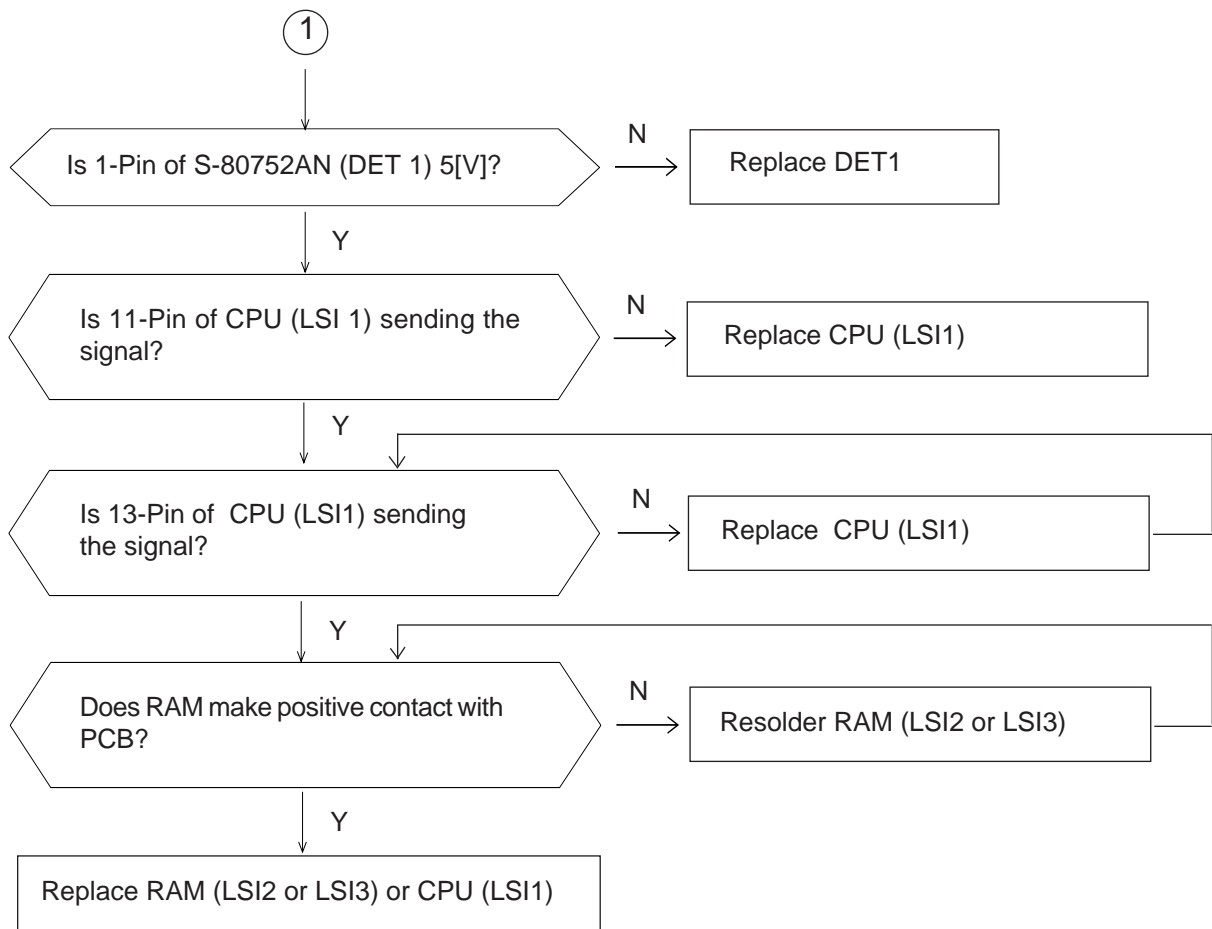


Input voltage	Output voltage
>5.2V	5V
<5.2V	0V

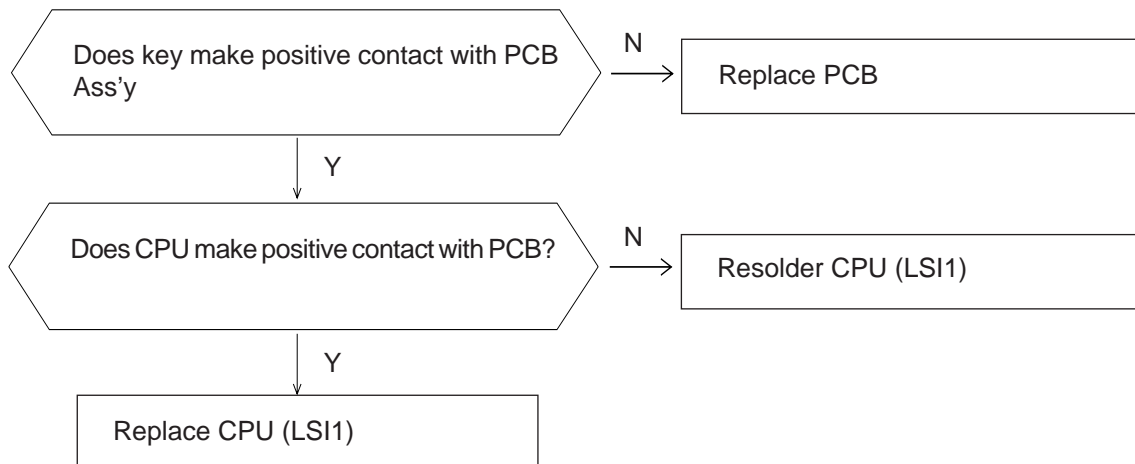
7. TROUBLESHOOTING

< No power on >

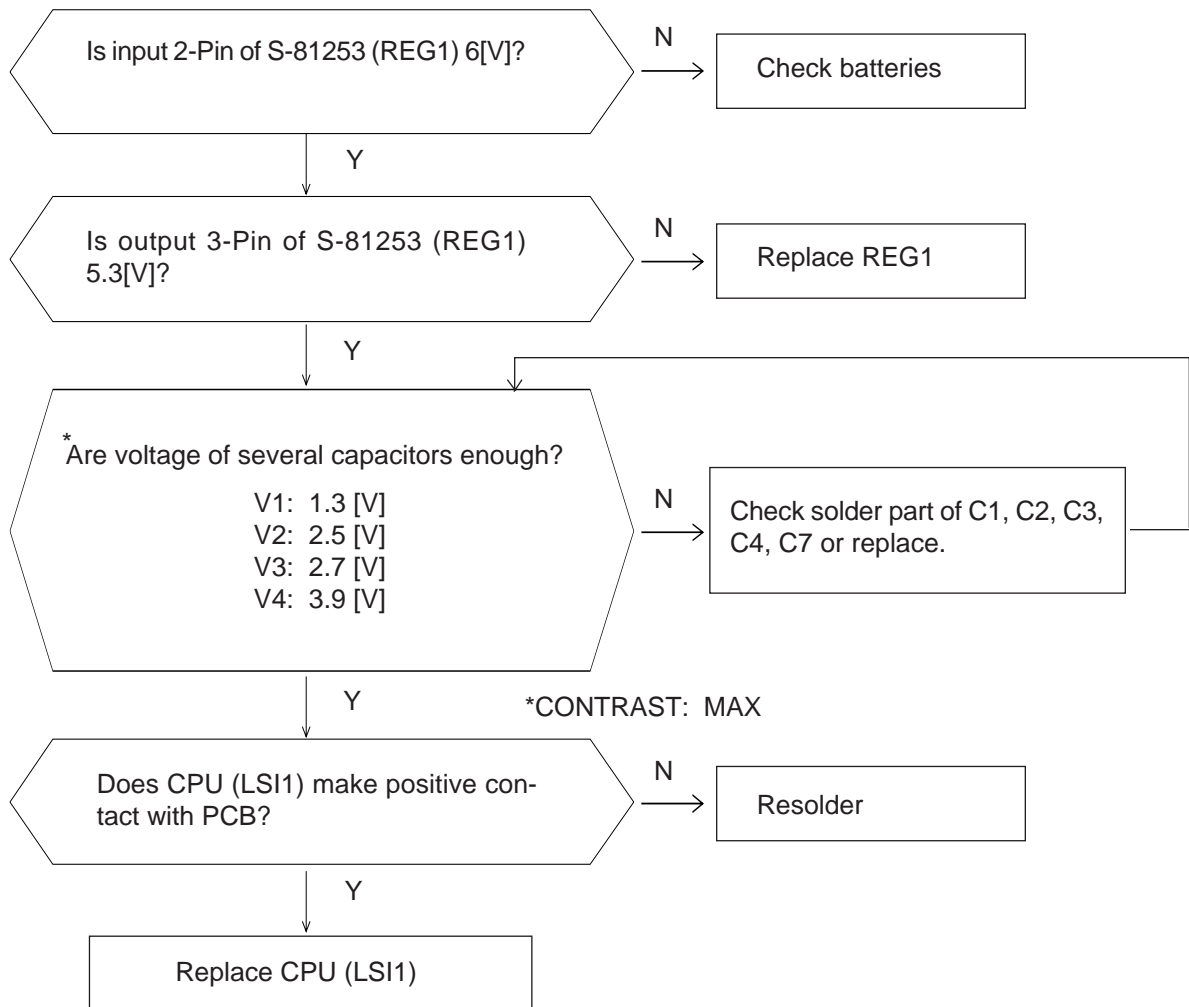




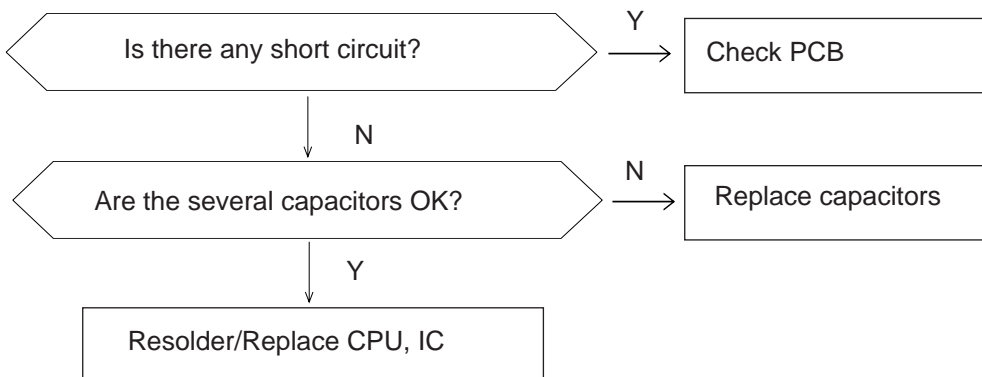
< No key input >



< No/Erratic display >




< High current consumption >



8. HARD CHECK

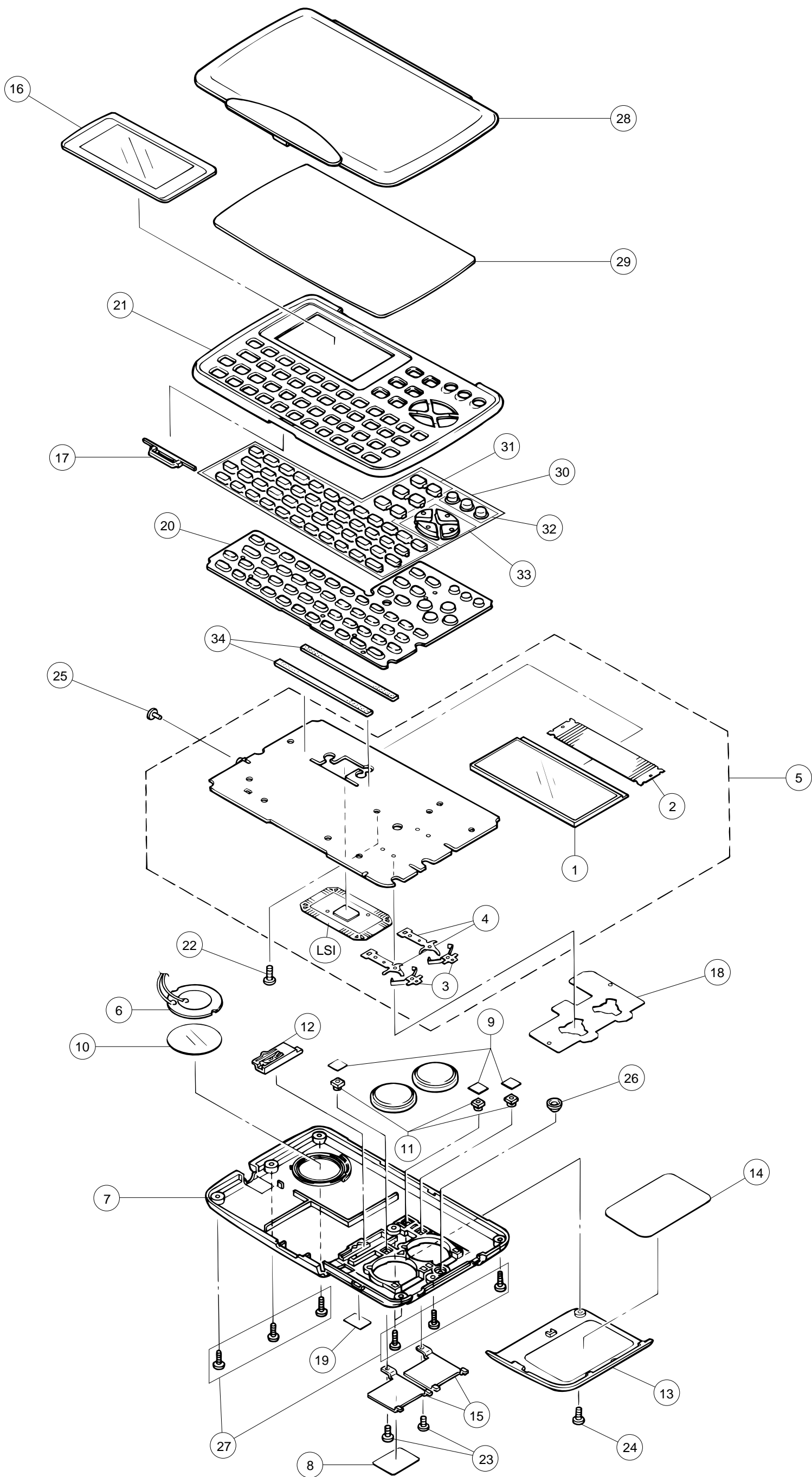
No.	OPERATION	DISPLAY	NOTE
1	Turn on while short the short pad (KEY61).	SELF TEST PROG. PRESS SEARCH QUIT BY OFF CASIO SEP. 1993	The short pad is located behind the tape ①9.
2	SEARCH	TEST MENU 1 DISP 2 MEMORY 3 KEY 4 BUZZER 5 I/F	Main menu
3	1	DISP 4 RVS. 1 WHITE 5 FRAME 2 BLACK 6 DOT 4 3 CHECK. 7 TIME	Display check
4	1	<div>No display</div>	
5	2	<div>All dots display</div>	
6	3	<div>Checker display</div>	
7	4	<div>Reverse checker display</div>	

No.	OPERATION	DISPLAY	NOTE
8	5	<div>FRAME</div>	
9	6	<div>Dots appear at 4 corners.</div>	
10	7	TIME DISPLAY 00:00:00	Check if timer is working.
11	ESC	TEST MENU 1 DISP 2 MEMORY 3 KEY 4 BUZZER 5 EXT	
12	3	KEY 1 RANDOM 2 AUTO	Key check
13	2	No display	
14	<div> HOME/WORLD MENU  OFF ON INS DEL TIME/DATA DISP CHNG ◀ ▲ ▼ ▶ ESC ↵ FUNC P CAPS SET SHIFT SPACE </div>	00 01 02 03 04 56 57	<ul style="list-style-type: none"> • Check the key No. appears on the display. • Check the key sounds. • To return to the menu mode, enter SEARCH.

No.	OPERATION	DISPLAY	NOTE
15	SEARCH	TEST 2 MEMORY MENU 3 KEY 4 BUZZER 1 DISP 5 EXT	
16	4	BUZZER 1 BEEP 2 ALARM1 3 ALARM2	Buzzer check
17	2	EXECUTING!!	Check the alarm 1 sound.
18	ESC	BUZZER 1 BEEP 2 ALARM1 3 ALARM2	
19	ESC	TEST 2 MEMORY MENU 3 KEY 4 BUZZER 1 DISP 5 EXT	
20	2	MEMORY 3 WR2 4 READ2 1 WR1 5 DUMP 2 READ1 6 CHKSUM	RAM check
21	1	WRITE1	

No.	OPERATION	DISPLAY	NOTE
22	(After few seconds)	MEMORY 3 WR2 4 READ2 1 WR1 5 DUMP 2 READ1 6 CHKSUM	
23	2	EXECUTING	
24		COMPLETE 32KB (64KB)	Check sound. If RAM has defect, error message will be appered.
25	ESC ESC	TEST 2 MEMORY MENU 3 KEY 4 BUZZER 1 DISP 5 EXT	
26	Press "RESET" key.		

9. ASSEMBLY VIEW



10. PARTS LIST

N	Item	Code No.	Parts Name	Specification	Q'ty		M	FOB Japan N.R.Yen Unit Price	R
					44	46			
10-1. PCB unit									
N	LSI1	6409 2760	COB LSI	C312133*1	1	1	1	1,010	A
	LSI2	2011 2849	LSI (RAM)	uPD43256AGU-1012LL	0	1	1	600	B
	LSI3	2011 2849	LSI (RAM)	uPD43256AGU-1012LL	1	1	1	600	B
	Q1	2259 0959	Chip digital transistor	DTC114YKT-146	1	1	20	12	B
	DET1	2105 3297	CMOS IC	S-80752AN-JG-T1	1	1	10	47	B
	REG1	2105 3290	Regulator	S-81253SGUP-DIJ-T1	1	1	5	60	B
	C1~4	2896 1645	Chip capacitor	C2012JF1C474Z-TP	4	4	20	4	C
	C5,6	2845 2534	Chip capacitor	MCH185A180JK	2	2	20	4	C
	C7,8,10,13	2845 1540	Chip capacitor	MCH212F104ZK	4	4	20	4	C
	C9,11	2803 6806	Electrolytic capacitor	10MS510M-MW	2	2	20	13	C
N	C12	2845 1540	Chip capacitor	MCH212F104ZK	0	1	20	4	C
	D1	2390 2128	Chip diode	MA740-(TX)	1	1	20	50	C
	D2	2390 0364	Schottky diode	MA713-TX	1	1	20	33	C
	R4	2797 3752	Chip resistor	ERJ-6GEYJ000	1	1	20	3	C
	R5	2791 1170	Chip resistor	ERJ-6GEYJ182	1	1	20	3	C
	R6	2797 0637	Chip resistor	ERJ-6GEYJ473	1	1	20	2	C
	R7	2797 1309	Chip resistor	ERJ-6GEYJ102	1	1	20	3	C
	R8,9	2797 1078	Chip resistor	ERJ-6GEYJ101	2	2	20	3	C
	R10	2791 1871	Chip resistor	ERJ-6GEYJ474	1	1	20	3	C
	R12	2797 2520	Chip resistor	ERJ-3GEAK206V	1	1	20	2	C
N	X1	7110 0642	Crystal oscillator	DT-26S	1	1	1	57	B
	JC1	3501 6538	Jack	HSJ1169-012010	1	1	20	56	C
	1	3335 4599	LCD	CD773-TS	1	1	1	490	A
	2	5610 7830	Heat seal L594AM	C311912-2	1	1	1	110	A
	3	6408 9410	Battery contact spring B	C311911-2	2	2	20	6	C
	4	6408 9400	Battery contact spring A	C413028-2	2	2	20	19	C
	34	6540 4970	Adhesive tape B-L571AM	C411704-2	2	2	5	53	C
	5	6408 9330	PCB ass'y (This ass'y contains the above parts as its element.)	C111198B*1	1	0	1	3,120	A
	5	6408 9340	PCB ass'y (This ass'y contains the above parts as its element.)	C111198B*2	0	1	1	3,510	A
	10-2. Mechanical parts for Taiwan product								
N	6	3122 2380	Buzzer	EFB-S55C41A8	1	1	10	36	C
	7	6411 6090	Lower case	FABDB101000	1	0	5	70	X
	7	6411 6200	Lower case	F1BDB101018	0	1	5	70	X
	8	6409 6210	Battery change label	HGC00001102	1	1	20	12	X
	9	6510 4440	Insulation seal	HGFC0001206	3	3	20	9	X
	10	6510 4500	Buzzer tape	HGFC0000501	1	1	10	17	X
	11	6512 1080	Nut	MD100000602	3	3	20	15	X
	12	6408 5920	Switch knob ass'y	DB2AXX4A00M*1	1	1	10	30	C
	13	6411 6080	Battery cover	FADDB100018	1	0	20	29	X
	14	6409 6230	Battery cover label	HGC00001200	1	1	20	16	X
N	15	6409 6120	Battery holder	ECDB1011108	2	2	20	26	X
	16	6411 6020	Display panel	EL5C0011102	1	0	5	63	C
	16	6411 6170	Display panel	EL5C0011200	0	1	5	63	C
	17	6410 9670	Knob	FB3DB100001	1	1	1	130	X
	18	6409 6150	Battery insulation	EL4C0001105	1	1	10	27	X

Notes: N – New parts

M – Minimum order/supply quantity

R – Rank

Q – Quantity used per unit

R – A : Essential

B : Stock recommended

C : Others

X : No stock recommended

N	Item	Code No.	Parts Name	Specification	Q'ty		M	FOB Japan N.R.Yen Unit Price	R
					44	46			
N	19	6411 6030	Mask tape	HGC00001501	1	1	20	9	X
N	20	6410 9700	Rubber key	LADB1010007	1	1	1	120	C
N	21	6411 6050	Upper case	FAADB100007	1	0	1	190	C
N	21	6410 9720	Upper case	FAADB100104	0	1	1	190	C
N	22	6510 4290	Screw	MAB80002303	1	1	20	3	X
	23	6510 4310	Screw	MAA80006311	2	2	20	3	C
	24	6510 4350	Screw	MAA80006302	1	1	20	2	B
	25	6511 7160	RB Insert	LC120000102	1	1	10	17	B
	26	6511 8400	Key contact rubber	LADB0220105	1	1	10	10	C
N	27	6410 9710	Screw	MAB80000301	7	7	20	2	X
N	28	6411 6060	Hard case	FC1DB100006	1	0	5	85	X
N	28	6411 6180	Hard case	FC1DB100014	0	1	5	85	X
N	29	6411 6070	Label	HGC00000904	1	0	1	110	X
N	29	6411 6190	Label	HGC00001005	0	1	1	110	X
N	30	6411 6040	Key top set	KGDB1010001*1	1	0	1	110	X
N	30	6410 9690	Key top set	KGDB1010019	0	1	1	130	X
	31~33		Not used						X
10-3. Mechanical parts for Malaysia product									
	6	3122 2380	Buzzer	EFB-S55C41A8	1	1	10	36	C
N	7	6408 9430	Lower case L594AM	C111167-2	1	0	5	70	X
N	7	6408 9440	Lower case L594EM	C111167-3	0	1	5	70	X
N	7	6408 9450	Lower case L594FM (USA,CANADA)	C111167-4	0	1	5	70	X
N	8	6409 8340	Battery change label L594AM	C413280-2	1	1	20	12	X
N	9	6512 5880	Insulation seal L571AM	C411700-2	3	3	20	9	X
N	10	6512 5920	Buzzer tape L571AM	C412699-1	1	1	20	17	X
N	11	6408 9460	Nut L594AM	C413032-2	3	3	10	35	X
	12	6408 5920	Switch knob ass'y	DB2AXX4A00M*1	1	1	10	30	C
N	13	6408 9170	Battery cover L594AM	C211308-2	1	0	10	27	X
N	13	6408 9230	Battery cover L594EM	C211308-3	0	1	10	27	X
N	14	6408 9180	Battery cover label L594AM	C413061-2	1	1	20	22	X
N	15	6408 9140	Battery holder L594AM	C413031-2	2	2	20	26	X
N	16	6408 9220	Display panel L594AM	C311923-2	1	0	5	63	C
N	16	6408 9290	Display panel L594EM	C311923-3	0	1	5	63	C
N	16	6408 9300	Display panel L594FM (USA,CANADA)	C311923-4	0	1	5	63	C
N	17	6408 9120	Knob L594AM	C311919-2	1	0	1	130	X
N	17	6408 9130	Knob L594EM	C311919-3	0	1	1	130	X
N	18	6408 9150	Battery insulation L594AM	C413064-2	1	1	10	38	X
N	19	6408 9160	Mask tape L594AM	C413062-2	1	1	20	9	X
N	20	6408 9100	Rubber key L594AM	C111165-2	1	1	1	140	C
N	21	6408 9020	Upper case L594AM	C111166-2	1	0	10	29	X
N	21	6408 9030	Upper case L594EM	C111166-3	0	1	10	29	X
N	22	6408 9190	Screw B-L594AM	C413065-4	1	1	20	4	X
N	23	6512 6130	Screw A-L571AM	C411820-5	2	2	20	12	C
N	24	6512 6170	Screw B-L571AM	C411820-6	1	1	20	9	B
N	25	6512 6040	Cap L571AM	C311730-1	1	1	20	30	B
	26	6512 5890	Key contact rubber L571AM	C311028-2	1	1	20	16	C
N	27	6408 9110	Screw A-L594AM	C413065-3	7	7	20	4	X
N	28	6408 9200	Hard case L594AM	C111169-2	1	0	5	85	X
N	28	6408 9240	Hard case L594EM	C111169-3	0	1	5	85	X
N	28	6408 9250	Hard case L594FM (USA,CANADA)	C111169-4	0	1	5	85	X
N	29	6408 9210	Label A-L594AM	C413060-2	1	0	1	110	X
N	29	6408 9260	Label A-L594EM	C413060-3	0	1	1	110	X
	30		Not used						

Notes: N – New parts

M – Minimum order/supply quantity

R – Rank

Q – Quantity used per unit

R – A : Essential

B : Stock recommended

C : Others

X : No stock recommended

N	Item	Code No.	Parts Name	Specification	Q'ty		M	FOB Japan N.R.Yen Unit Price	R
					44	46			
N	31	6408 9060	Key top set A-L594AM	C111159-2	1	0	1	130	X
N	31	6408 9070	Key top set A-L594EM	C111159-3	0	1	1	130	X
N	32	6408 9040	Key top set B-L594AM	C311917-2	1	0	10	40	X
N	32	6408 9050	Key top set B-L594EM	C311917-3	0	1	10	40	X
N	33	6408 9080	Key top set C-L594AM	C311918-2	1	0	20	13	X
N	33	6408 9090	Key top set C-L594EM	C311918-3	0	1	20	13	X

Notes: N – New parts
M – Minimum order/supply quantity
R – Rank
Q – Quantity used per unit

R – A : Essential
B : Stock recommended
C : Others
X : No stock recommended

CASIO COMPUTER CO.,LTD.
Service Division

8-11-10, Nishi-Shinjuku
Shinjuku-ku, Tokyo 160, Japan
Telephone: 03-3347-4926